

REMARKS

Applicant has studied the Office Action dated July 22, 2010. Claims 77, 81, 82, 86, 90, and 91 are currently pending in the application, claims 1-76, 78, 79, 83-85, 87, 88, and 92-94 having previously been canceled and claims 80 and 89 being canceled without prejudice in this amendment. Claims 77 and 86 are the only independent claims and have been amended to more clearly claim disclosed embodiments by incorporating features of their respective dependent claims 80 and 89. Accordingly, no new matter has been added.

It is submitted that the claims as amended are in condition for allowance. Reconsideration is respectfully requested.

Substance of Interview

As a preliminary matter, Applicants gratefully acknowledge the courtesy extended by Examiners Opiribo Georgewill and Steve D'Agosta in the August 24, 2010 personal interview with Applicants' representative, Lew Macapagal. The Examiner's comments and explanations were helpful and very much appreciated. Pursuant to MPEP § 713.04, Applicants provide the following remarks.

Prior to the interview, the Examiner was provided with a proposed Amendment. Claim 77 was discussed with regard to the original disclosure and the Beckmann reference. The Examiner agreed that the 112 rejection will be withdrawn if amended as discussed during the interview. Further, the Examiner suggested that if claims 80, 81, and 82 were amended into claim 77, and similarly, claims 89, 90, and 91 amended into claim 86, then claims 77 and 86 would be deemed allowable pending approval from Examiner Opirobo Georgewill's supervisor. The Examiner's attention to this application is gratefully acknowledged.

Objection to Specification

The Examiner objected to the specification as failing to provide proper antecedent basis for the claimed subject matter.

Specifically, the Examiner asserted that claims 77 and 86 include the limitation "wherein the MBMS identifier is configured by a Radio Resource Control (RRC) layer," but there is no antecedent basis for the claimed recitation in the specification as originally filed. As agreed to in the interview of August 24, 2010, the above identified limitation of claims 77 and 86 has been

amended to recite “wherein the MBMS identifier is identified by a Radio Resource Control (RRC) layer.” The Examiner indicated that the objection will be withdrawn if claims 77 and 86 are amended as identified above.

The Examiner also asserted that claims 77 and 86 recite the limitation “and the first identifier and the second identifier are only utilized when the MTCH is mapped onto at least one transport channel,” but there is no antecedent basis for the claimed recitation in the specification as originally filed. As will be explained in detail below, the limitation “the first identifier and the second identifier are only utilized when the MTCH is mapped onto at least one transport channel” is fully supported by FIG. 7 and paragraphs [0074], [0119] and [0120] of the published specification (US 2004/0117860). As recognized by the Examiner in the interview of August 24, 2010, the above identified limitation of claim 77 and 86 is supported by the application as originally filed. Accordingly, Applicants request that the objection to the specification be withdrawn.

§ 112 Rejections

The Examiner rejected claims 77, 80-82, 86, and 89-91 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

With this paper, claims 80 and 89 have been canceled without prejudice. It is, therefore, respectfully submitted that the rejection is moot with respect to claims 80 and 89 and it is respectfully requested that the rejection be withdrawn.

Specifically, the Examiner asserted that while independent claims 77 and 86 include the limitation “wherein the MBMS identifier is configured by a Radio Resource Control (RRC) layer,” Applicant was not in possession of the claimed invention at the time the application was filed. As agreed to in the interview of August 24, 2010, the above identified limitation of claims 77 and 86 has been amended to recite “wherein the MBMS identifier is identified by a Radio Resource Control (RRC) layer.”

Furthermore, the Examiner asserted that while independent claims 77 and 86 include the limitation “and the first identifier and the second identifier are only utilized when the MTCH is mapped onto at least one transport channel,” Applicant was not in possession of the claimed invention at the time the application was filed.

Applicants respectfully assert that the limitation “the first identifier and the second identifier are only utilized when the MTCH is mapped onto at least one transport channel” is fully supported by FIG. 7 and paragraphs [0074], [0119] and [0120] of the published specification (US 2004/0117860). Paragraph [0074] of the published specification states that “TCTF indicates whether a logical channel mapped to the common transport channel is a common logical or a dedicated logical channel.” Referring to FIG. 7, if the MTCH (which is a common logical channel) is not utilized, then no common logical channel is utilized (i.e., only dedicated logical channels are utilized). Accordingly, the TCTF shown in FIG. 7 will also not be utilized because there is no need to indicate whether the logical channel is a common or dedicated channel, since all logical channels are dedicated channels. In view of this disclosure, Applicants assert that one of ordinary skill in the art can deduce that the feature of the first identifier being “only utilized when the MTCH is mapped onto at least one transport channel” of claim 1 is clearly supported by the filed specification.

Regarding the feature that the second identifier is “only utilized when the MTCH is mapped onto at least one transport channel” of claim 1, Applicants assert that this feature is also supported by FIG. 7 and paragraphs [0074], [0119] and [0120] of the published specification. For example, as stated in paragraph [0119] of the published specification, “...MTCH can be also used instead of CTCH”, and as stated in paragraph [0120] of the published specification, “[u]pon receiving the RLC PDU through CTCH, an MAC-c/sh 20 adds the m-RNTI (“*second identifier*”) and UE ID to the RLC PDU and performs TCTF (“*first identifier*”) multiplexing” (notations added). Thus, the second identifier (“m-RNTI”) is only utilized when the MTCH is mapped onto the transport channel, similar to the first identifier as explained above.

On page 5 of the present Office Action, the Examiner indicates that because paragraph [0069] of the published specification discloses that there is more than one type of common logical channel, and as such, any one of the common logical channels would have a logical channel identifier (first identifier), then the first identifier of the claimed invention is not utilized only when the MTCH is mapped onto at least one transport channel. Applicants respectfully disagree with the Examiner’s reasoning.

Applicants respectfully note that FIG. 7 of the specification describes one embodiment of the present invention. As such, the Applicants are entitled to draft claims based on such embodiment. Here, the feature “the first identifier and the second identifier are only utilized

when the MTCH is mapped onto at least one transport channel” is directly based on the embodiment disclosed in FIG. 7. Therefore, although the specification may describe features related to other embodiments, such as the existence of more than one logical channel which may have a logical channel identifier (first identifier), as pointed out by the Examiner, the Applicants respectfully submit that the description of such features does not preclude the Applicants from claiming that “the first identifier and the second identifier are only utilized when the MTCH is mapped onto at least one transport channel” because such limitation is taught by the embodiment of FIG. 7.

Applicants appreciate the Examiner’s confirmation, in the Interview Summary dated August 31, 2010, that the amended limitation “wherein the MBMS identifier is identified by a Radio Resource Control (RRC) layer” recited in claims 77 and 86 would overcome the 112 rejection. Applicants further appreciate the Examiner’s confirmation, in the Interview Summary, that the 112 rejection on the feature “the first identifier and the second identifier are only utilized when the MTCH is mapped onto at least one transport channel” will be withdrawn based on support found in FIG. 7.

In view of the forgoing, Applicants respectfully submit that claimed features “wherein the MBMS identifier is identified by a Radio Resource Control (RRC) layer” and “the first identifier and second identifier are only utilized when the MTCH is mapped onto at least one transport channel” are fully supported by the original disclosure. Accordingly, it is respectfully asserted that the grounds for the rejections of independent claims 77 and 86 have been overcome. It is further respectfully asserted that the grounds for the rejections of claims 80-82 and 89-91 have also been overcome as those claims depend from independent claim 77 or 86.

Rejection under 35 U.S.C. § 103(a)

Claims 77, 80-82, 86, and 89-91 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Beckmann et al. (“Beckmann” U.S. Pat. Pub. No. 2003/0035423) in view of LG Electronics Inc, “RAN considerations on MBMS,” TSG-RAN Working Group 2 Meeting #30, June, 2002 (“LG”) and further in view of Sarkkinen et al. (“Sarkkinen” U.S. Pat. Pub. No. 2003/0211855) and 3GPP (“Universal Mobile Telecommunication System (UMTS); Medium Access Control (MAC) protocol specification (3GPP TS 25.321 version 5.1.0 Release 5), June 2006 (“3GPP”). This rejection is respectfully traversed.

With this paper, claims 80 and 89 have been canceled without prejudice. It is, therefore, respectfully submitted that the rejection is moot with respect to claims 80 and 89 and it is respectfully requested that the rejection be withdrawn.

Independent claims 77 and 86, as amended, recite that “the MBMS identifier is an MBMS radio network temporary identifier (m-RNTI).” While it is noted that the Examiner proposes, in the Interview Summary, to incorporate limitations of claims 80-82 and 89-91 into independent claims 77 and 86, respectively, to place this application in allowable condition, it is respectfully submitted that amended independent claims 77 and 86 incorporating the limitation of claims 80 and 89, respectively, include sufficient allowable subject matter to place this application in allowable condition.

On page 11 of the Office Action, the Examiner asserts that Beckmann discloses that the first identifier and the second identifier are only utilized when the MTCH is mapped onto at least one transport channel in paragraphs [0064]-[0065]. Further, during the interview of August 24, 2010, the Examiner pointed to Fig. 5 and paragraph [0053] of Beckmann to further support the alleged disclosure of the feature “the first identifier and the second identifier are only utilized when the MTCH is mapped onto at least one transport channel.” Applicant respectfully disagrees with the Examiner’s interpretation of Beckmann.

The cited portions of Beckmann are shown below.



Fig. 5

[0053] According to the present invention, the “MC-ID” field contains the information by which the multicast group can be identified. If there are several possibilities for the identification of the multicast group, a further field “MC-ID type” may be additionally added, indicating the type of multicast group identification. This may be meaningful, for example, if a multicast group can be identified either via a UMTS-specific identity or, alternatively, addressing according to the Internet protocol IP can be used. Furthermore, according to the present invention, the “MC-ID type” field may also simply indicate the length of the “MC-ID” field; for example, if only data for two multicast groups are being transmitted over the same general physical and transport channel, an “MC-ID” field of 1 bit would be adequate, whereas, for three or four multicast groups, an “MC-ID” field of 2 bits in length would be necessary, etc.

[0064] Only in the case of variant a) does the TCTF field indicate as before that the logical channel over which the MAC layer has received the data packet is a DTCH. The C/T field is not used in this exemplary embodiment, since it is assumed that only one logical channel is projected onto the FACH or DSCH and consequently no multiplexing information is necessary.

[0065] If there are several possibilities for the identification of the multicast group, the second not yet occupied value of the field UE-ID type could also be additionally used.

It is respectfully submitted that the above identified portions of Beckmann do not disclose that the first identifier (i.e., TCTF) and the second identifier (i.e., m-RNTI) are only utilized when the MTCH is mapped onto the transport channel, as recited in independent claims 77 and 86. The cited portions of Beckmann merely disclose a general MAC PDU format having a “TCTF” and an “MC-Id.” Namely, contrary to independent claims 77 and 86, Beckmann does not clearly disclose what types of identifiers are utilized based upon which specific logical is mapped onto the transport channel. That is, mapping between a specific logical channel (i.e., MTCH) and a transport channel cannot be derived from Beckmann. In fact, nowhere in Beckmann does it disclose or suggest a word, a term, or any other expression that can be deduced by or related to the “MTCH.”

Furthermore, it is respectfully submitted that the functional characteristics and structures of the “MC-Id” of Beckmann and the “m-RNTI” of claims 77 and 86 are clearly distinguishable from each other. Specifically, the “MC-Id” of Beckmann is used to identify the multicast group, as disclosed in paragraph [0053]. In contrast, the “m-RNTI” of independent claims 77 and 86 is used to distinguish between MBMS services. Therefore, contrary to the Examiner’s assertion, Beckmann, even if combined with other cited references, fails to teach or suggest each and every limitation recited in independent claims 77 and 86. At least for the above discussed reasons, it is respectfully submitted that the presently claimed invention is allowable over the cited references.

Accordingly, it is respectfully asserted that independent claims 77 and 86 are allowable over the cited combination of references. It is further respectfully asserted that claims 81-82, which depend from independent claim 77, and claims 90-91, which depend from independent claim 86, also are allowable at least by virtue of their dependency from their respective allowable base claims.

CONCLUSION

In view of the above remarks, Applicants submit that the currently pending claims of the present application are in condition for allowance. Reconsideration of the application is requested.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein; and no amendment made was for the purpose of narrowing the scope of any claim, unless Applicants have argued herein that such amendment was made to distinguish over a particular reference or combination of references.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned agent at the Los Angeles, California telephone number (213) 623-2221 to discuss the steps necessary for placing the application in condition for allowance.

Customer No. 035884

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Respectfully submitted,

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Enclosure: Claims Correspondence Table